

General

Title

Symptom control during chemotherapy: percentage of chemotherapy patients 18 years of age and older whose nausea severity rating was none or mild during days 5 to 15 of the chemotherapy cycle.

Source(s)

MN Community Measurement. Symptom control during chemotherapy: 2017 pilot report year (dates of index 07/01/2016 to 12/31/2016). Minneapolis (MN): MN Community Measurement; 2015. 21 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Outcome

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of chemotherapy patients 18 years of age and older whose nausea severity rating was none or mild during days 5 to 15 of the chemotherapy cycle.

Rationale

Based on existing research, inclusion of patient reporting in routine cancer care improves symptom detection and management. Patient reported outcomes (PRO) provide essential clinical information and when integrated into clinical practice, PROs have been found to improve symptom control, communication and patient satisfaction.

A substantial body of evidence shows that without patient reporting, clinicians miss or underestimate many symptoms. Clinician assessment of symptoms has low reliability; whereas patient reporting is substantially more reliable and has been shown to be feasible (Basch, 2014).

Refer to *Cancer Care: Symptom Control During Chemotherapy and/or Radiation: Impact and Recommendation Document* (see also the "Companion Documents" field) for additional information and graphic depictions of the differences between patient-reported symptoms and clinician-reported symptoms.

Evidence for Rationale

Basch E. The rationale for collecting patient-reporting symptoms during routine chemotherapy. In: 2014 ASCO educational book. Alexandria (VA): American Society of Clinical Oncology (ASCO); 2014. p. 161-5. [27 references]

MN Community Measurement. Cancer care: symptom control during chemotherapy and/or radiation: impact and recommendation document. Minneapolis (MN): MN Community Measurement; 2014 Oct. 5 p. [6 references]

Primary Health Components

Chemotherapy; symptom control; nausea severity rating

Denominator Description

For patients age 18 years and older with a new patient evaluation and management or consultation office visit that occurs during the index period AND Cycle Day 1 date of chemotherapy occurs during the index period AND within 90 days of the new patient visit, the number of chemotherapy cycles 1, 2 and 3 in which the patient's nausea was assessed with a Patient-Reported Outcomes Common Terminology Criteria for Adverse Events (PRO-CTCAE) symptom severity tool during Days 5 to 15 of the cycle. Day 1 of the cycle must occur on or prior to 15 days before the end of the assessment period (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

The number of cycles in which the patient's nausea severity rating was none or mild during Days 5 to 15 of the cycle

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

- It is estimated that there will be more than 1.66 million people diagnosed with cancer during 2014 in the United States (U.S.), with nearly 30,000 new cases estimated in Minnesota. The highest

estimates of new cases by cancer type include:

Est # of New Cases, 2014	United States	Minnesota
Prostate	233,000	3,870
Female Breast	232,670	3,820
Lung & Bronchus	224,210	3,070
Colon & Rectum	136,830	2,240

- The 5-year survival rate for all cancers diagnosed between 2003 and 2009 is 68%; however, survival statistics vary greatly by cancer type and stage at diagnosis. In 2014, an estimated 585,720 people in the U.S. will die from cancer, including 9,750 people in Minnesota.
- Survival has improved substantially over the past decades for individuals diagnosed with certain types of cancer, in part due to advances in chemotherapy and radiation therapy.
- The National Institutes of Health (NIH) estimates that the over-all costs of cancer in 2009 were \$216.6 billion: \$86.6 billion for direct medical costs and \$130.0 billion for indirect mortality costs (American Cancer Society [ACS], 2014).
- Annually, over 1.1 million individuals in the U.S. are estimated to receive chemotherapy and/or radiation therapy for cancer. Of these individuals, approximately 650,000 receive chemotherapy, 643,000 receive radiation, and 180,000 receive both during a year (Halpern & Yabroff, 2008).
- The risk of being diagnosed with cancer increases with age, with most cases occurring in adults who are middle aged or older. Approximately 77 percent of all cancers are diagnosed in people 55 years of age and older. In the U.S., men have slightly less than a 1 in 2 lifetime risk of developing cancer over the course of a lifetime and women have a little more than a 1 in 3 risk (ACS, 2014).
- Of those patients being treated, there is fairly even distribution by gender and the following age groups: less than 55 years, 55 to 64 years, 65 to 74 years and 75 years and older. The majority of treated patients are non-Hispanic white, which reflects the prevalence estimates. Other racial/ethnic groups identified in the treatment estimates include blacks and Hispanics, representing 10% and 6% respectively (Halpern & Yabroff, 2008).

Evidence for Additional Information Supporting Need for the Measure

American Cancer Society (ACS). Cancer facts & figures 2014. Atlanta (GA): American Cancer Society (ACS); 2014. 70 p.

Halpern MT, Yabroff KR. Prevalence of outpatient cancer treatment in the United States: estimates from the Medical Panel Expenditures Survey (MEPS). Cancer Invest. 2008 Jul;26(6):647-51. [PubMed](#)

MN Community Measurement. Cancer care: symptom control during chemotherapy and/or radiation: impact and recommendation document. Minneapolis (MN): MN Community Measurement; 2014 Oct. 5 p. [6 references]

Extent of Measure Testing

MN Community Measurement (MNCM) conducts validity testing to determine if quality measures truly measure what they are designed to measure, and conducts reliability testing to determine if measures yield stable, consistent results. Validity testing is done to see if the concept behind the measure reflects the quality of care that is provided to a patient and if the measure, as specified, accurately assesses the intended quality concept. Reliability testing is done to see if calculated performance scores are reproducible.

Evidence for Extent of Measure Testing

MN Community Measurement. Measure testing. [internet]. Minneapolis (MN): MN Community Measurement; 2014 [accessed 2017 Apr 17].

State of Use of the Measure

State of Use

Pilot testing

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Person- and Family-centered Care

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Data Collection for the Measure

Case Finding Period

July 1 through June 30

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Diagnostic Evaluation

Encounter

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

For patients in the eligible population, the number of chemotherapy cycles 1, 2 and 3 in which the patient's nausea was assessed with a Patient-Reported Outcomes Common Terminology Criteria for Adverse Events (PRO-CTCAE) symptom severity tool during Days 5 to 15 of the cycle. Day 1 of the cycle must occur on or prior to 15 days before the end of the assessment period*.

Eligible Population:

Ages: 18 years and older as of July 1 of the index period**

Event (Index): Initial Chemotherapy Regimen: An index occurs when all of the following criteria are met:

A new patient evaluation and management office visit (*New Patient Visit Value Set*) occurs during the index period

AND

Cycle 1 Day 1 date of chemotherapy (*Chemotherapy Value Set*) occurs during the index period AND within 90 days of the new patient visit (*New Patient Visit Value Set*)

Note: Refer to original measure documentation for specific Current Procedural Terminology (CPT) codes included in the value sets.

**Index Period*: July 1 through December 31, 2016

***Assessment Period*: July 1, 2016 through June 30, 2017

Exclusions

None

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

The number of cycles in which the patient's nausea severity rating was none or mild during Days 5 to 15 of the cycle

Exclusions

None

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Type of Health State

Individually Reported Health State

Instruments Used and/or Associated with the Measure

- Measure #3: Symptom Control During Chemotherapy: Nausea Measure Algorithm
- Patient-Reported Outcomes Common Terminology Criteria for Adverse Events (PRO-CTCAE) symptom severity tool

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Symptom control during chemotherapy: nausea.

Measure Collection Name

Symptom Control during Chemotherapy

Submitter

MN Community Measurement - Health Care Quality Collaboration

Developer

MN Community Measurement - Health Care Quality Collaboration

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

MN Community Measurement (MNCM) measure development workgroup comprised of oncologists, primary care, oncology nurse practitioners, data analysts, consumers, health plan and state agency representatives.

Financial Disclosures/Other Potential Conflicts of Interest

None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Jan

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

Measure Availability

Source available from the [MN Community Measurement Web site](#) .

For more information, contact MN Community Measurement at 3433 Broadway St. NE, Broadway Place East, Suite #455, Minneapolis, MN 55413; Phone: 612-455-2911; Web site: mncm.org ; E-mail: info@mncm.org.

Companion Documents

The following is available:

MN Community Measurement. Cancer care: symptom control during chemotherapy and/or radiation: impact and recommendation document. Minneapolis (MN): MN Community Measurement; 2014 Oct. 5 p. Available from the [MN Community Measurement Web site](#) .

NQMC Status

This NQMC summary was completed by ECRI Institute on April 18, 2107. The information was verified by the measure developer on May 3, 2017.

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Production

Source(s)

MN Community Measurement. Symptom control during chemotherapy: 2017 pilot report year (dates of index 07/01/2016 to 12/31/2016). Minneapolis (MN): MN Community Measurement; 2015. 21 p.

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